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| APPLICATION NO.   | FILING DATE         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---------------------|----------------------|---------------------|------------------|
| 10/695,015  | 10/28/2003          | Thomas Foo           | PI1330USNA          | 4259             |
| 43693   | 693 7590 12/14/2005 |                      | EXAMINER            |                  |
| INVISTA NORTH AMERICA S.A.R.L.  |                     |                      | SACKEY, EBENEZER O  |                  |
| THREE LITTLE FALLS CENTRE/1052<br>2801 CENTERVILLE ROAD<br>WILMINGTON, DE 19808 |                     |                      | ART UNIT            | PAPER NUMBER     |
|   |                     |                      | 1626                |                  |

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.       | Applicant(s)                       |  |  |  |
|--|-----------------------|------------------------------------|--|--|--|
|  | 10/695,015            | FOO ET AL.                         |  |  |  |
| Office Action Summary  | Examiner              | Art Unit                           |  |  |  |
|  | EBENEZER SACKEY       | 1626                               |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |                       |                                    |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                       |                                    |  |  |  |
| Status   |                       |                                    |  |  |  |
| 1) Responsive to communication(s) filed on   | _•                    | ,                                  |  |  |  |
|  | action is non-final.  |                                    |  |  |  |
| 3) Since this application is in condition for allowar  |                       |                                    |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |                       |                                    |  |  |  |
| Disposition of Claims  |                       | •                                  |  |  |  |
| 4)⊠ Claim(s) <u>1</u> is/are pending in the application.   |                       |                                    |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |                       |                                    |  |  |  |
| 5) Claim(s) is/are allowed.  |                       |                                    |  |  |  |
| 6)⊠ Claim(s) <u>1</u> is/are rejected.   |                       |                                    |  |  |  |
| 7) Claim(s) is/are objected to.  |                       |                                    |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement. |                                    |  |  |  |
| Application Papers   |                       | ·                                  |  |  |  |
| 9) The specification is objected to by the Examiner.   |                       |                                    |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |                       |                                    |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |                       |                                    |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |                       |                                    |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |                       |                                    |  |  |  |
| Priority under 35 U.S.C. § 119   |                       |                                    |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:   |                       |                                    |  |  |  |
| 1. Certified copies of the priority documents have been received.  |                       |                                    |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |                       |                                    |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |                       |                                    |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |                       |                                    |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |                       |                                    |  |  |  |
|  | n) vi                 |                                    |  |  |  |
|  |                       |                                    |  |  |  |
| Attachment(s)  |                       |                                    |  |  |  |
| 1) X Notice of References Cited (PTO-892)  | 4) Interview Summary  |                                    |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da   | ate<br>atent Application (PTO-152) |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date   | 6) Other:             | atont Application (FTO-192)        |  |  |  |

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### DETAILED ACTION

#### Status of Claim

Claim 1 is pending.

## Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

## Claim Rejections - 35 U.S.C. § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

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Patentability shall not be negatived by the manner in which the invention was made.

- 2. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
    - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Breikss (U.S.Patent number 5,523,453)('453').

Applicants claim a process for hydrocyanation of at least one substrate selected from the group consisting of 2-, or 3- or 4-pentennitrile and 3-butenenitrile comprising:

Contacting the substrate with hydrogen cyanide in the presence of a zero-valent nickel catalyst and a promoter selected from iron (II) chloride and manganese (II) chloride, which was obtained as a byproduct from the production of titanium tetrachloride from titanium ore.

Breikss discloses a hydrocyanation process, which comprises reacting 2-pentenenitrile with hydrogen cyanide in the presence of a zero-valent nickel catalyst and employs iron chloride or manganese chloride as a promoter in the process. See the entire reference especially column 1, lines 60 bridging column 2, lines 1-55, column 12, lines 26-29 for the various promoters.

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Thus, the instant claim differ from '453' in the source of the promoter. The instant claim require the promoter (by-product) from the production of titanium tetrachloride, whereas '453' is silent on the source of the promoter.

However, this difference is not considered patentable distinction and is thus, prima facie obvious absent a showing of unexpected results and/or properties. There is no

Thus, the claimed source is an obvious modification available to one of ordinary skill in the art.

indication by way of evidence or otherwise in the specification that discloses the

significance of the claimed source of the promoter.

Therefore, at the time of filing this application, one of ordinary skill in the art would thus, have been motivated to prepare nitriles with the required reactants of Breikss with the expectation that the resulting product would maintain high yield and/or selectivity because the indicated promoters are preferred.

Accordingly, it would be prima facie obvious to one of ordinary skill in the art to prepare nitriles as disclosed by the reference with the required promoters because each of the promoters is preferred and has been expected to operate with a reasonable expectation of success. Hence, the instantly claimed process would therefore have been suggested to one of ordinary skill in the art absent a showing of unexpected results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. Sackey whose telephone number is (571) 272-0704. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane, can be reached on (571) 272-0699. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is

(571) 272-1600.

ÈOS

December 10, 2005

Joseph K. McKane

Supervisory Patent Examiner Art Unit 1626, Group 1600

**Technology Center 1**